

Remarks

In the non-final Office Action, Examiner rejects claims 1-19, 21, 23-27, 30, and 31 under 35 U.S.C. § 103(a) based on U.S. Patent No. 6,961,731 to Holbrook (“Holbrook”) in view of U.S. Patent Application Publication No. 2005/0004889 to Bailey et al. (“Bailey”).

By this Amendment, Applicants amend claims 1, 14, 21, and 30 to improve form and have cancelled claim 19 without prejudice or disclaimer. Additionally, new claims 32 and 33 are added. Support for the subject matter in new claims 32 and 33 can be found, for example, in paragraph 0033 of the originally filed specification.

Interview Summary

Applicants appreciate the courtesy extended by the Examiner in the interview conducted with the Applicants’ representative on September 11, 2007. In the interview, the outstanding rejection under 35 U.S.C. § 103(a) based on Holbrook and Bailey were discussed. The relevancy of the presently claimed invention to Holbrook was particularly discussed. No agreement was reached as to the allowability of the claims.

*Rejection Under
35 U.S.C. § 103(a)*

Claims 1-19, 21, 23-27, 30, and 31 stand rejected under 35 U.S.C. § 103(a) based on Holbrook and Bailey. For the following reasons, Applicants respectfully traverse this rejection.

Amended claim 1 is directed to a method comprising receiving a search query; performing a search in response to the query to determine which documents are related to the search query, the search being performed, on a database including a plurality of document categories, to obtain a list of search results corresponding to each of at least two of the categories, the plurality of document categories including an image category; ranking the lists of search results relative to one another based on a content of documents in each of the lists of search results; and generating a document in which the search results are placed in an organization determined based, at least in part, on the ranking of the lists of search results.

Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features recited in claim 1. Neither Holbrook nor Bailey disclose or suggest, for example, ranking lists of search results relative to one another based on a content of documents in each of the lists of search results. The Examiner contends that this portion of claim 1, as previously presented, is disclosed by Holbrook, and particularly points to column 9, lines 2-6 and column 10, lines 34-36 of Holbrook. (Office Action, page 3.)

Applicants disagree with the Examiner's interpretation of Holbrook. Column 9, lines 2-6 of Holbrook state:

For example, the window 202 in this particular embodiment shows two textual alternatives from which the user selects, either the first numerically ranked matching "1-50 sites", "1-100 sites" (not shown) or "all" (not shown), per search to be displayed.

(Holbrook, column 9, lines 2-6.) This section of Holbrook describes an interface in which a user may select that either the first 50 or the first 100 web sites matching a search query for display. In no way can this section of Holbrook be said to disclose or suggest ranking lists of search results relative to one another, as recited in claim 1, much less

ranking lists of search results relative to one another based on a content of documents in each of the lists of search results.

The cited portion of column 10 of Holbrook states:

As shown in FIG. 4, each matching web site for the search request in this embodiment is represented by its rank number. In the example shown, each matching web site or data element is represented by a bulb-like category member icon 402 having the web site's relative rank number depicted therein, such graphical representation referred to herein as a "web site icon or category member icon."

(Holbrook, column 10, lines 34-40.) This section of Holbrook discloses representing web sites by a "bulb-like category member icon 402" in which the relative rank number of the web site is depicted. Obtaining and displaying a rank number for a web site is not equivalent to, as recited in claim 1, ranking lists of search results relative to one another based on a content of documents in each of the lists of search results.

In general, Holbrook is directed to the organization and presentation of data, including displaying a graphical representation of categories for data elements.

(Holbrook, Abstract.) Holbrook, as shown in Fig. 4, for instance, describes an interface in which web sites 402 are graphically shown as belonging to parent categories 420.

(Holbrook, col. 10, lines 41-43.) Although Holbrook does mention "ranking" of web sites 402, the ranking described by Holbrook refers to ranking web sites for a search query to obtain a rank number for the web site. (See Holbrook, column 9, lines 66 and 67; and column 10, lines 34-40.) Thus, Holbrook does not disclose or suggest, as is recited in claim 1, obtaining a list of search results corresponding to each of at least two categories and ranking the lists of search results relative to one another. At most, Holbrook can be said to rank web documents to a search query. It can be appreciated that this is not equivalent to, as recited in claim 1, obtaining a list of search results

corresponding to each of at least two categories and ranking the lists of search results relative to one another based on a content of documents in each of the lists of search results.

Arguments similar to those given above were presented by Applicants' representative in the interview conducted on September 11, 2007. In the interview, the Examiner contended that the category names shown in section 408 (Fig. 4) of Holbrook (e.g., "1. Vehicles," "2. Recreation and Hobbies," "3. Auctions," and "4. Sports") illustrate ranking lists of search results relative to one another. As discussed in the interview, Applicants disagree with the Examiner's interpretation of Holbrook.

Holbrook discusses this portion of Fig. 4 at column 12, lines 13-37. This section of Holbrook states:

In another example, matching web sites may be shown in the context of their respective first (or first uncommon) level subcategories. This can be accomplished in any suitable manner. In the embodiment of FIG. 4, for example, positioning the user's computer mouse or pointer over a parent category name 403 will cause a pop-up window to appear identifying the first uncommon level subcategories of the web sites of that parent category. For example, positioning the user's cursor over the parent category name 403 "SHOPPING" in the black category icon 406 will cause window 405 to appear. Window 405 includes a heading 408, which is the parent category name ("Shopping") and the common category path of the depicted web sites.

Below the heading 408 is a textual listing of all of the first level subcategory names (or abbreviations thereof) for the depicted web sites in the "SHOPPING" category, namely "Vehicles", "Recreation and Hobbies", "Auctions", and "Sports." If all of the depicted matching web sites in that group were instead to have the same first level subcategory and possibly also the same further level subcategories, the heading 408 will include all such common subcategory name(s) (not shown), and the first uncommon, or next, level subcategories of the web sites will be listed in window 405 (see e.g. window 505, FIG. 5).

This section of Holbrook describes the display of a number of subcategory names for a category. Although the subcategory names shown under heading 408 are numbered one through four, Holbrook does not mention that this numbering is the result of any kind of ranking of the subcategory names. If anything, the numbers one through four under heading 408 of Holbrook appear to be used to simply show the user how many different subcategory names are being shown. This section of Holbrook cannot be said to in any way disclose or suggest, as recited in claim 1, ranking lists of search results relative to one another based on a content of documents in each of the lists of search results.

Applicants submit that Bailey does not cure the above-discussed deficiencies of Holbrook. Therefore, for at least these reasons, Applicants submit that Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features of claim 1, and accordingly, the rejection of claim 1 based on Holbrook and Bailey should be withdrawn. Claims 2-13 depend, either directly or indirectly, on claim 1, and therefore, the rejection of these claims should also be withdrawn.

Independent claim 14 also stands rejected under 35 U.S.C. § 103(a) based on Holbrook and Bailey. Applicants respectfully traverse this rejection.

Amended claim 14 is directed to a search engine comprising a search component configured to identify which documents are related to a search query from a database including a plurality of document categories, the search component obtaining a list of search results corresponding to each of at least two of the categories; a ranking component configured to rank the lists of search results relative to one another, the ranking being based on a comparison of the search query to contents of documents in the list of search results corresponding to each of the at least two of the categories; and an

interface generation component configured to generate a document in which the search results are organized based, at least in part, on the ranking of the lists of search results.

Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features recited in claim 14. Neither Holbrook nor Bailey, alone or in combination, disclose or suggest, for example, the ranking component recited in claim 14. The Examiner contends that Holbrook discloses this feature of claim 14. (Office Action, pages 5 and 6.)

As previously discussed, Holbrook does not disclose or suggest ranking lists of search results relative to one another. Holbrook, at most, can be said to rank web documents to a search query, but Holbrook does not disclose or suggest a ranking component configured to rank lists of search results relative to one another, as recited in claim 14.

Additionally, Applicants submit that Holbrook and Bailey, either alone or in combination, completely fail to disclose or suggest that the ranking is based on a comparison of the search query to contents of documents in the list of search results corresponding to each of the at least two of the categories, as is recited in amended claim 14. As previously discussed, Holbrook does not disclose or suggest ranking lists of search results relative to one another, and thus could not possibly disclose or suggest performing the ranking based on a comparison of the search query to contents of documents in the list of search results corresponding to each of the at least two of the categories.

Bailey does not cure this deficiency of Holbrook. Bailey is directed to a search engine system and content analysis methods for locating web pages with product

offerings. (Bailey, Title.) Bailey, however, does not disclose or suggest performing a ranking based on a comparison of the search query to contents of documents in the list of search results corresponding to each of the at least two of the categories, as recited in claim 14. In rejecting the previous version of claim 14, the Examiner particularly pointed to paragraphs 0034 – 0036 of Bailey. (Office Action, page 6.) Paragraph 0036 of Bailey, in particular, states:

[0036] The query server 140 includes a category ranking process 150 that prioritizes, by category, the results of searches across all of the various databases 141-147. The prioritization scheme is based upon an assessment of the significance of each category to the search query submitted by the user. The query server 140 also includes a spell checker 152 for detecting and correcting misspellings in search attempts, and a search tool 154 capable of generating search results from a database (e.g. the Books database 141) in response to a query submitted by a user. The search tool 154 prioritizes the items within a search result using different criteria depending upon the database used for the search. One approach, used for the Product Spider database 147, ranks the search result items through the well known "term frequency inverse document frequency" (TFIDF) approach, in which the weighting applied to each term of a multiple-term query is inversely related to the term's frequency of appearance in the database. In other words, the term in a query that appears least often in a database (e.g. the Product Spider database 147) is considered to be the most discriminating term in the query, and thus is given the greatest weight by the search tool 154. Algorithms for implementing this approach are well known and are commonly available in software development kits associated with commercial search engines such ALTAVISTA and EXCITE.

This paragraph of Bailey describes a category ranking process that prioritizes, by category, the results of searches across various databases. The prioritization scheme of Bailey is specifically described as “based upon an assessment of the significance of each category to the search query submitted by the user.” In contradistinction, the ranking recited in amended claim 14 is based on a comparison of the search query to contents of

documents in the list of search results corresponding to each of the at least two of the categories.

For at least these reasons, Applicants submit that Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features of claim 14, and accordingly, the rejection of claim 14 based on Holbrook and Bailey should be withdrawn. Claims 15-18 depend, either directly or indirectly, on claim 14, and therefore, the rejection of these claims should also be withdrawn.

Independent claim 21 also stands rejected under 35 U.S.C. § 103(a) based on Holbrook and Bailey. Applicants respectfully traverse this rejection.

Amended claim 21 is directed to a method of organizing documents categorized into a plurality of categories. The method includes receiving a search query; performing a search in response to the search query in each of the plurality of categories to locate the documents; ranking the plurality of categories relative to one another based on contents of the documents in each of the categories, the ranking also including looking for terms in the search query that tend to indicate a particular document category is likely to be related to the search query; and generating a results document in which the documents are organized by category and in which the documents of higher ranking categories are more prominently placed in the results document.

Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features recited in claim 21. Neither Holbrook nor Bailey, alone or in combination, disclose or suggest, for example, ranking a plurality of categories relative to one another based on contents of the documents in each of the categories, as recited in claim 21. The Examiner contends that Holbrook discloses this feature of claim 21,

(Office Action, pages 6 and 7), and particularly cites column 9, lines 2-6 and column 10, lines 34-36 of Holbrook as being relevant to this feature of claim 21. These sections of Holbrook were discussed previously with respect to the arguments for claim 1. These sections of Holbrook describe representing web sites by a “bulb-like category member icon 402” in which the relative rank number of the web site is depicted. Obtaining and displaying a rank number for a web site is not equivalent to, however, as recited in claim 21, ranking the plurality of categories relative to one another based on contents of the documents in each of the categories.

Bailey does not cure this deficiency of Holbrook. Accordingly, Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features of claim 21.

For at least these reasons, Applicants submit that Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features of claim 21. Accordingly, the rejection of claim 21 based on Holbrook and Bailey should be withdrawn. Claims 23-27 depend, either directly or indirectly, on claim 21, and therefore, the rejection of these claims should also be withdrawn.

Independent claim 30 also stands rejected under 35 U.S.C. § 103(a) based on Holbrook and Bailey. Applicants respectfully traverse this rejection.

Claim 30 is directed to a computer-readable medium containing programming instructions for execution by a processor. The computer-readable medium including instructions for receiving input documents categorized into a plurality of categories, the plurality of categories including an image category; instructions for ranking the categories corresponding to the input documents based on contents of the input

documents in each of the categories; and instructions for generating a results document in which the input documents are organized by category and in which the input documents of higher ranking categories are more prominently placed in the results document.

Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features recited in claim 30. Neither Holbrook nor Bailey, either alone or in combination, disclose or suggest, for example, instructions for ranking categories corresponding to the input documents based on contents of the input documents in each of the categories, as recited in claim 30. The Examiner contends that Holbrook discloses this feature of claim 30, (Office Action, page 8), and particularly cites column 9, lines 2-6 and column 10, lines 34-36 of Holbrook as being relevant to this feature of claim 30. These sections of Holbrook were discussed previously with respect to the arguments for claim 1. These sections of Holbrook describe representing web sites by a “bulb-like category member icon 402” in which the relative rank number of the web site is depicted. Obtaining and displaying a rank number for a web site is not equivalent to, however, as recited in claim 30, ranking categories corresponding to the input documents based on contents of the input documents in each of the categories.

For at least these reasons, Applicants submit that Holbrook and Bailey, either alone or in combination, do not disclose or suggest each of the features of claim 30. Accordingly, the rejection of claim 30 based on Holbrook and Bailey should be withdrawn. Claim 31 depends on claim 30, and therefore, the rejection of this claim should also be withdrawn.

New Claims

New claims 32 and 33 depend from claims 1 and 30. Applicants submit that neither Holbrook nor Bailey, either alone or in combination, disclose the features recited in these claims. Neither Holbrook nor Bailey disclose or suggest, as recited in claim 32, calculating values that define a closeness of a comparison of the search query to the documents in each of the lists of search results; and ranking the lists of search results based on the calculated values. Claim 33 recites features similar to those recited in claim 32 and is thus also not disclosed or suggested by Holbrook and Bailey.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute these assertions/requirements in the future.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

Harrity Snyder, L.L.P.

By: /Brian Ledell, Reg. No. 42784/
Brian Ledell
Reg. No. 42,784

Date: September 21, 2007
11350 Random Hills Road
Suite 600
Fairfax, Virginia 22030
Telephone: 571-432-0800
Facsimile: 571-432-0808